

ABSTRACT

A transverse longitudinal-cylinder sewing machine includes an automatic thread loosening device, a tension adjustment mechanism, an automatic thread cutting bi-directional solenoid device and a differential fabric driving teeth displacement control device. The differential fabric driving teeth displacement control device consists of a primary transmission mechanism, first and second push mechanisms, a rocking mechanism, first and second adjustment mechanisms that are co-axle, and first and second fabric driving mechanisms located inside a cylinder normal to the co-axle. The axial direction of the cylinder is directed towards the operator so that the axis of the cylinder is normal to the entire transverse work station of the sewing machine.